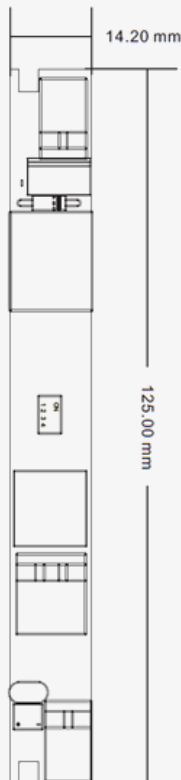


# MTL-48CC ZIGBEE 1CH



DK230106

- Deep and smooth dimming to 0.1%, flicker free
- Driver is dimmable by current set (0-100%).
- ZigBee dimmable LED light device based on ZigBee 3.0 protocol
- Adjustable current by dip switch
- Magnet absorption installation application, no high frequency interference sound
- Special design for magnet track light and linear lighting
- 5-year warranty



|                                  |                                                                                                        |
|----------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Output Selectable Current</b> | 100 mA, 150 mA, 200 mA, 250 mA, 300 mA, 350 mA, 400 mA, 450 mA, 500 mA, 550 mA, 600 mA, 650 mA, 700 mA |
| <b>Output DC Voltage range</b>   | 6-42 V                                                                                                 |
| <b>Rated Power</b>               | 30 W                                                                                                   |
| <b>Dimming interface</b>         | ZIGBEE 3.0                                                                                             |
| <b>Typical Input Voltage</b>     | 48VDC±5% (Polarity Free)                                                                               |
| <b>Input current</b>             | 0.65A @ full load                                                                                      |
| <b>Efficiency</b>                | 95%                                                                                                    |
| <b>Standby Power</b>             | <0.5W                                                                                                  |
| <b>Over Load</b>                 | The load voltage is out of range, the current drops until the power is turned on again.                |
| <b>Non-load</b>                  | Prevents damage to the load when it is powered on.                                                     |
| <b>Short Circuit</b>             | Output close, auto recovery after fault removed                                                        |
| <b>Anti-reverse</b>              | Prevent driver and load damage                                                                         |
| <b>Working Temp.</b>             | -20°C ~ +45°C                                                                                          |
| <b>Working Humidity</b>          | 10% ~ 95% RH non-condensing                                                                            |
| <b>IP Grade</b>                  | IP 20                                                                                                  |

## IN COMPLIANCE WITH

- IEC 55015

## ZIGBEE NETWORK PAIRING THROUGH COORDINATOR OR HUB (ADDED TO A ZIGBEE NETWORK)

**Step 1:** Remove the device from previous zigbee network if it has already been added to, otherwise pairing will fail. Please refer to the part "**Factory Reset Manually**".

# MTL-48CC ZIGBEE 1CH

DK230106



## APPLICATION

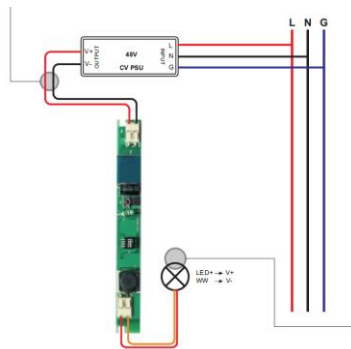
- track light
- decorative lighting
- accent lighting
- task lighting
- general lighting
- recessed furniture LED
- aquarium lamps
- horticulture - vertical farms

### Note:

- 1) Directly TouchLink (both not added to a ZigBee network), each device can link with 1 remote.
- 2) TouchLink after both added to a ZigBee network, each device can link with max. 30 remotes.
- 3) To control by both gateway and remote, add remote and device to network first then TouchLink.
- 4) After TouchLink, the device can be controlled by the linked remotes.

**Step 2:** From your ZigBee Controller or hub interface, choose to add lighting device and enter Pairing mode as instructed by the controller.

**Step 3:** Re-power on the device to set it into network pairing mode (connected light flashes twice slowly), 15 seconds timeout, repeat the operation.

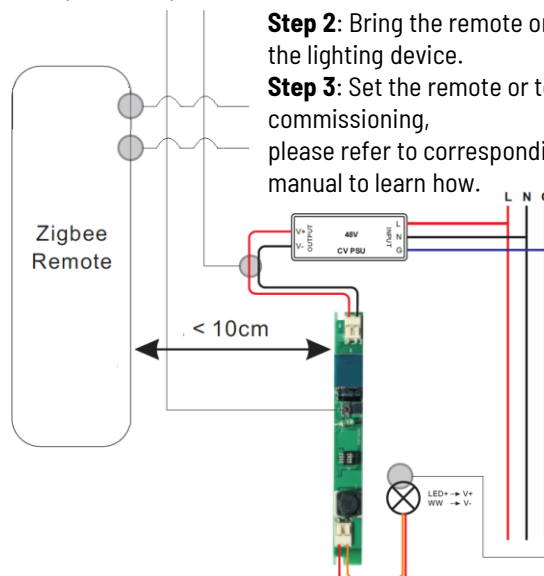


**Step 4:** Connected light will blink 5 times and then stay solid on, then the device will appear in your controller's menu and can be controlled through controller or hub interface.

## TOUCHLINK TO A ZIGBEE REMOTE

**Step 1: Method 1:** Short press program button 4 times (or reset power of the device 4 times) to start Touchlink commissioning immediately, 180S timeout, repeat the operation.

**Method 2:** Reset power of the device, Touchlink commissioning will start after 15S if it's not added to a zigbee network, 165S timeout. Or start immediately if it's already added to a network, 180S timeout. Once timeout, repeat the operation.



**Step 2:** Bring the remote or touch panel within 10cm of the lighting device.

**Step 3:** Set the remote or touch panel into Touchlink commissioning, please refer to corresponding remote or touch panel manual to learn how.

**Step 4:** There shall be indication on the remote for successful link and connected light will flash twice.

# MTL-48CC ZIGBEE 1CH



DK230106

## Note:

1) If the device is already at factory default setting, there is no indication when factory reset again .

2) All configuration parameters will be reset after the device is reset or removed from the network.

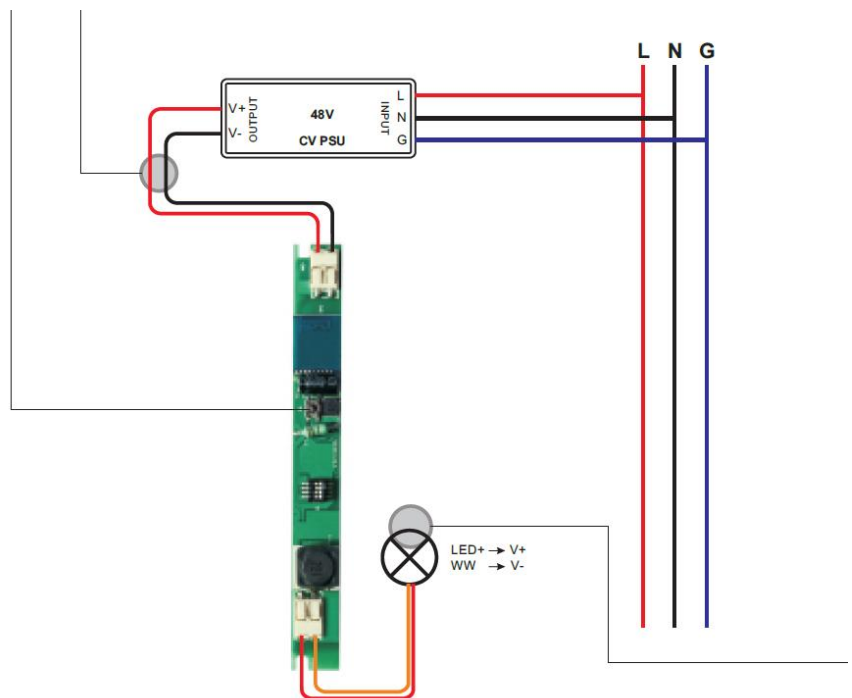
- Enables to control ON/OFF, light intensity of connected single color LED lights
- ZigBee end device that supports Touchlink commissioning
- Can directly pair to a compatible ZigBee remote via Touchlink
- Supports find and bind mode to bind a ZigBee remote
- Supports zigbee green power and can bind max. 20 zigbee green power switches
- Compatible with universal ZigBee gateway products
- Compatible with universal DIM ZigBee remotes

## REMOVE FROM A ZIGBEE NETWORK

From your ZigBee controller or hub interface, choose to delete or reset the lighting device. The connected light blinks 3 times to indicate successful reset.

## FACTORY RESET

**Step 1:** Short press program button 5 times continuously (or reset power of the device for 5 times continuously).



**Step 2:** Connected light will blink 3 times to indicate successful reset.

**Step 2:** Bring the remote or touch panel within 10cm of the lighting device.

**Step 3:** Set the remote or touch panel into Touch Reset procedure to reset the device, please refer to corresponding remote or touch panel manual to learn how.

**Step 4:** There shall be indication on the remote and connected light flashes 3 times for successful reset.

# MTL-48CC ZIGBEE 1CH

DK230106

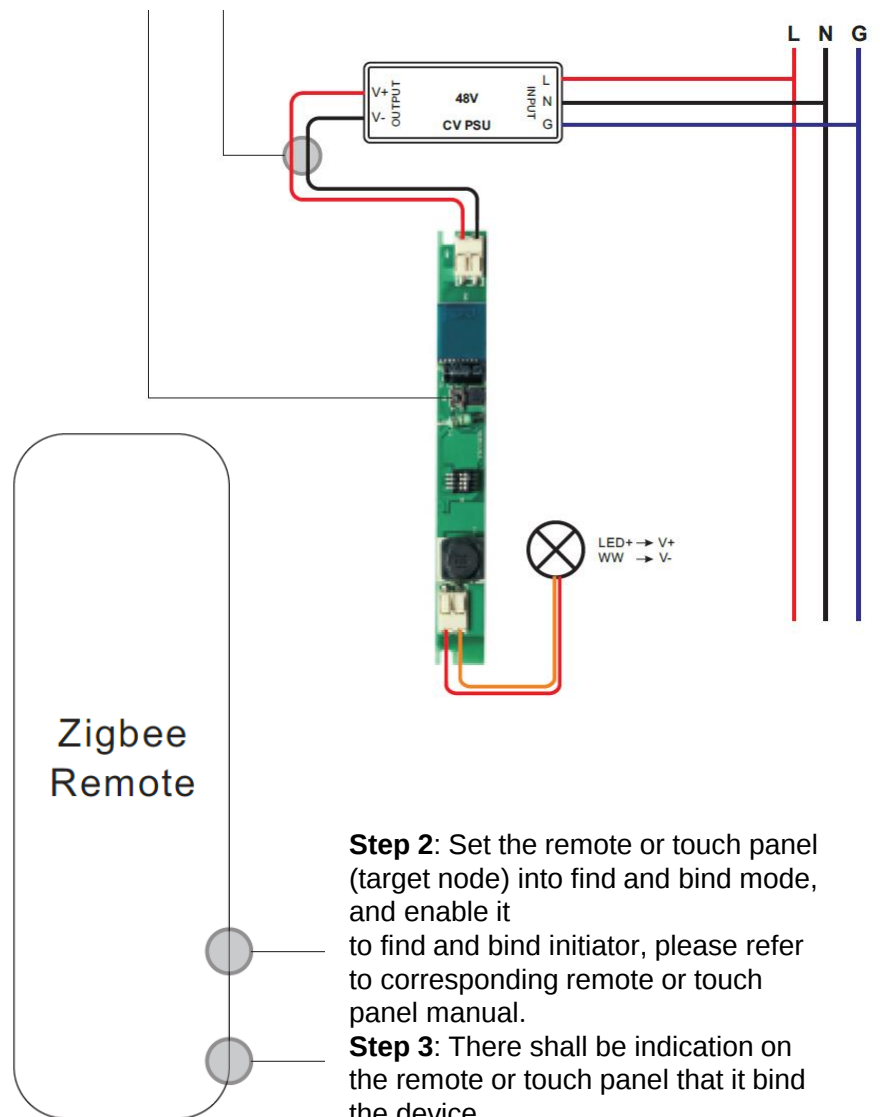


## Note:

Make sure the device and remote already added to a gateway which supports find and bind mode.

## FIND AND BIND MODE

**Step 1:** Short press program button 3 times (or reset power of the device (initiator node) 3 times) to start Find and Bind mode (connected light flashes slowly) to find and bind target node, 180 seconds timeout, repeat the operation



**Step 2:** Set the remote or touch panel (target node) into find and bind mode, and enable it to find and bind initiator, please refer to corresponding remote or touch panel manual.

**Step 3:** There shall be indication on the remote or touch panel that it bind the device successfully and can control it then.

# MTL-48CC ZIGBEE 1CH

DK230106

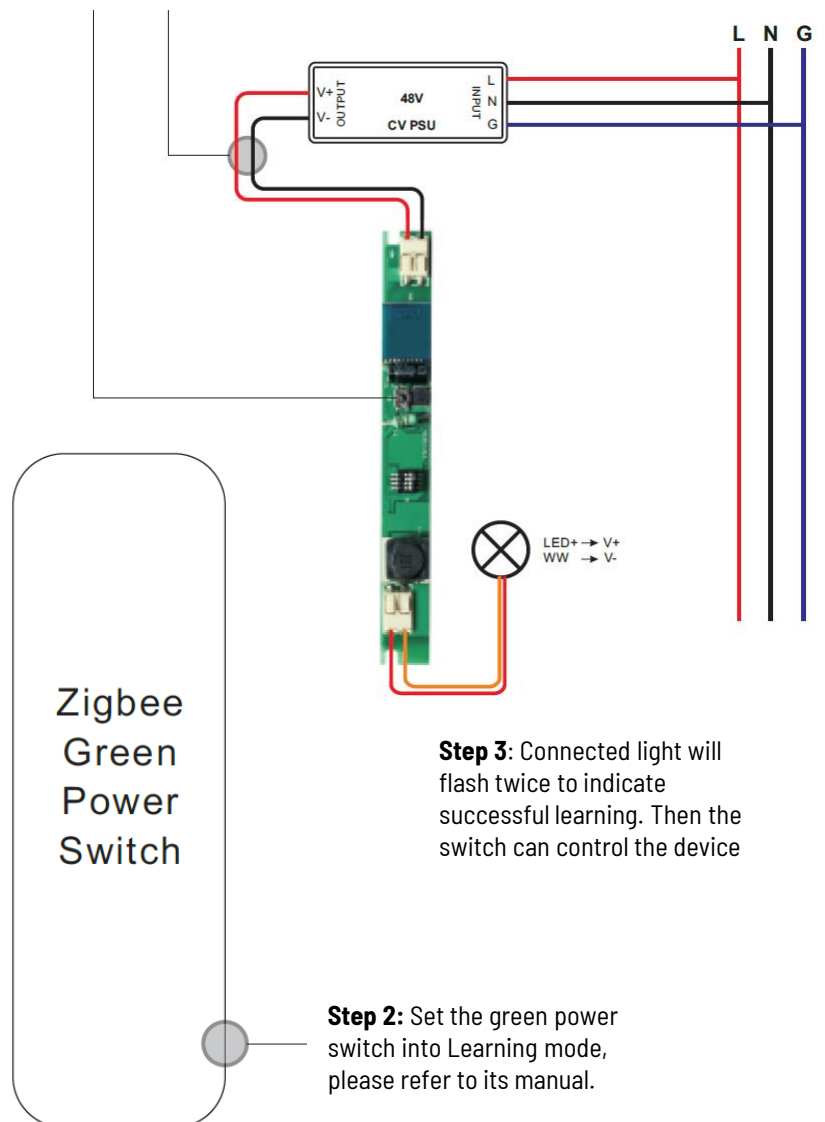


**Note:**

Each device can learn up to 20 zigbee green power switches.

## LEARNING A ZIGBEE GREEN POWER SWITCH

**Step 1:** Short press program button 4 times (or reset power of the device 4 times to start Learning to GP switch mode (connected light flashes twice), 180 seconds timeout, repeat the operation.



# MTL-48CC ZIGBEE 1CH

DK230106

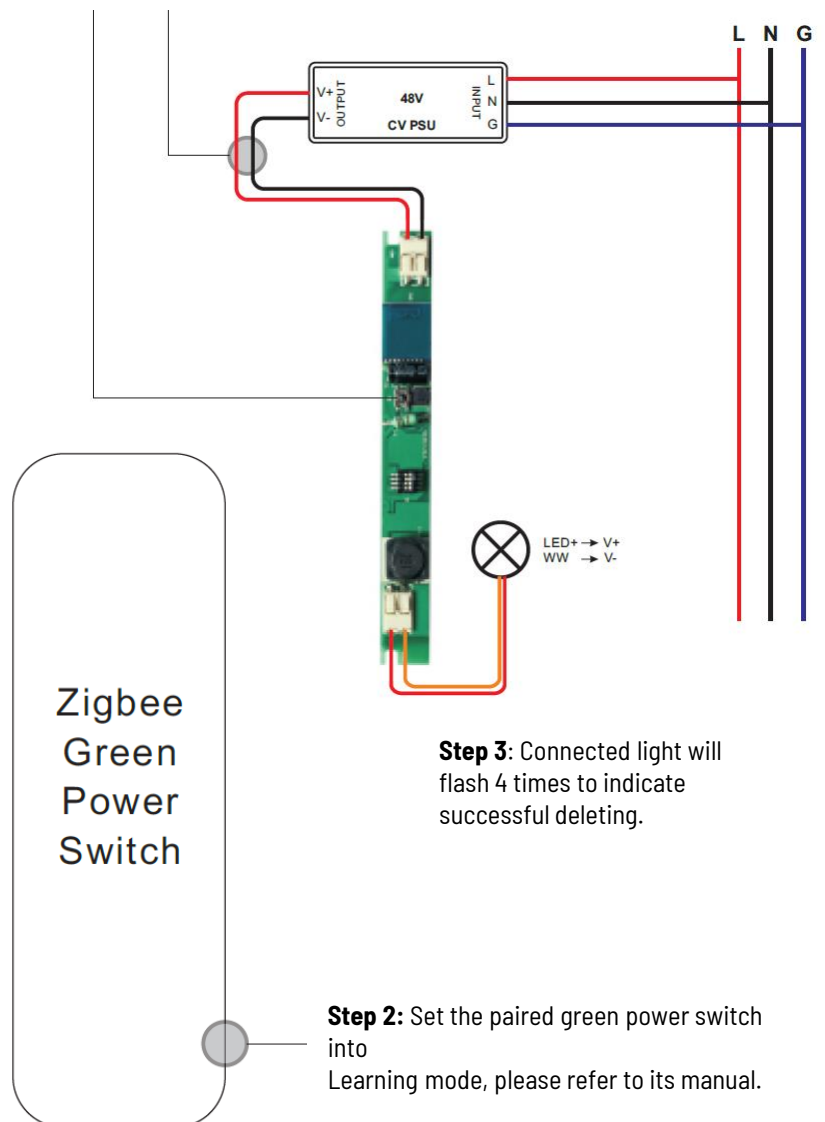


## Note:

Each device can learn up to 20 zigbee green power switches.

## DELETE ZIGBEE GREEN POWER SWITCH

**Step 1:** Short press program button 3 times (or reset power of the device 3 times) to start delete Learning to GP switch mode (connected light flashes slowly), 180 seconds timeout, repeat the operation..



# MTL-48CC ZIGBEE 1CH



DK230106

## APPLICATION

- track light
- decorative lighting
- accent lighting
- task lighting
- general lighting
- recessed furniture LED
- aquarium lamps
- horticulture - vertical farms

## ZIGBEE CLUSTERS THE DEVICE SUPPORTS

### Input Clusters

- 0x0000: Basic • 0x0003: Identify • 0x0004: Groups • 0x0005: Scenes
- 0x0006: On/off • 0x0008: Level Control • 0x0b05: Diagnostics

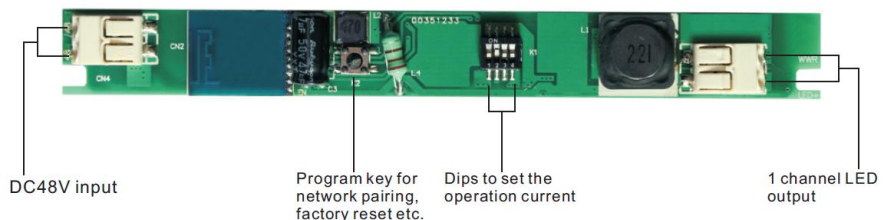
### Output Clusters

- 0x0019: OTA

## OTA

The device supports firmware updating through OTA, and will acquire new firmware from zigbee controller or hub every 10 minutes automatically.

## PRODUCT OVERVIEW



## CURRENT SELECT

Dips to set the operation current



|       | 1 | 2 | 3 | 4 |
|-------|---|---|---|---|
| 100mA | ○ | ○ | ○ | ○ |
| 150mA | ○ | ○ | ○ | ● |
| 200mA | ○ | ○ | ○ | ● |
| 250mA | ○ | ○ | ○ | ● |
| 300mA | ○ | ○ | ○ | ● |
| 350mA | ○ | ○ | ○ | ● |
| 400mA | ○ | ○ | ○ | ● |
| 450mA | ○ | ○ | ○ | ● |

|       | 1 | 2 | 3 | 4 |
|-------|---|---|---|---|
| 500mA | ○ | ○ | ○ | ○ |
| 550mA | ○ | ○ | ○ | ○ |
| 600mA | ○ | ○ | ○ | ○ |
| 650mA | ○ | ○ | ○ | ○ |
| 700mA | ○ | ○ | ○ | ○ |

## SAFETY & WARNINGS

- DO NOT install with power applied to device
- DO NOT expose the device to moisture
- DO NOT set operation current with power applied to device

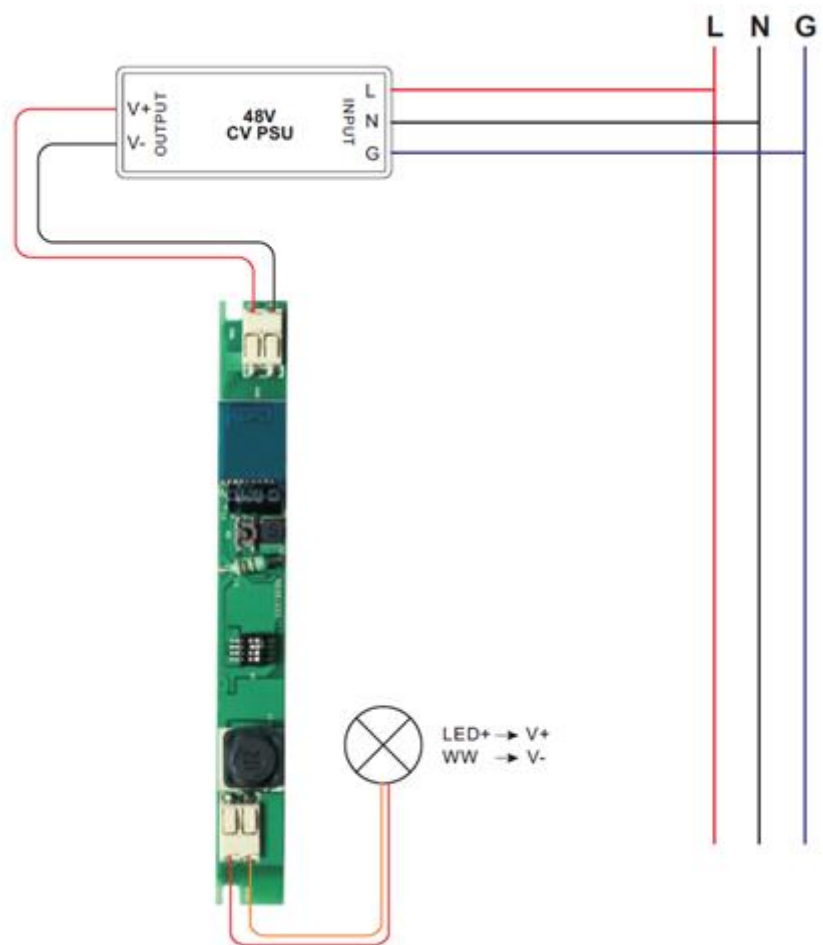
# MTL-48CC ZIGBEE 1CH

DK230106



- Enables to control ON/OFF, light intensity of connected single color LED lights
- ZigBee end device that supports Touchlink commissioning
- Can directly pair to a compatible ZigBee remote via Touchlink
- Supports find and bind mode to bind a ZigBee remote
- Supports zigbee green power and can bind max. 20 zigbee green power switches
- Compatible with universal ZigBee gateway products
- Compatible with universal DIM ZigBee remotes

## ELECTRICAL INSTALLATION



# MTL-48CC ZIGBEE 1CH



DK230106

## DOWNLOAD DATA

- 3D PDF FILE
- STEP FILE
- EU DECLARATION OF CONFORMITY (CE):

## CONNECTOR



## ORDER CODE FORMAT

|                |      | NUMBER OF CHANNELS<br>1 CHANNEL |     |      |
|----------------|------|---------------------------------|-----|------|
| PS - NIV - MTL | 48CC | ZIGBEE                          | 1CH | VA01 |
| FAMILY         |      | COMMUNICATION<br>ZIGBEE 3.0     |     |      |

Minimum Order Quantity: 1

## GENERAL TERMS OF USE

- Connecting to the power supply should be done when the power supply is off.
- During installation of the driver module it is absolutely necessary to use ESD protection. Luminaire design should protect the module from ESD. Installation of the module should be done by qualified person.
- Components on the module must be protected against mechanical damage and exposure to liquids and dirt.
- The electrolytic capacitor should not have contact with hot surface (exposure to heat may significantly decrease lifetime of module).

**Niviss is not responsible for any damage or failure due to not comply with above rules. Otherwise, the complaint will not be taken into account.**

## ENVIRONMENTAL CAUTION!

It is prohibited to dispose of obsolete and waste electrical and electronic equipment together with regular household wastes. They should be properly sorted and recycled. Old electrical and electronic equipment should be returned to a waste collection point established by a waste-management service. Waste electrical and electronic equipment can be broken down to base materials and then recycled. For more information regarding waste management please contact your local authorities, waste-management service or the seller of electrical and electronic devices.